



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001

TELEPHONE
AREA CODE 716 546-2700

August 30, 1994

U.S. Nuclear Regulatory Commission
Regional Administrator, Region I
Mr. Thomas T. Martin
475 Allendale Road
King of Prussia, PA 19406

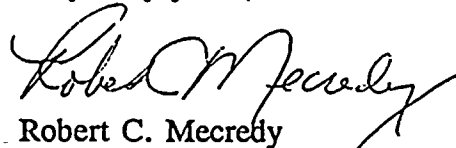
Subject: Request For Enforcement Discretion
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Martin,

In accordance with 10 CFR Part 2, Appendix C, and using the guidance contained in NRC Inspection Manual Part 9900, RG&E requests Enforcement Discretion with respect to Ginna Station Technical Specification 3.4.2.1.a. The request, background information, and justification is attached.

This request was initially discussed with the NRC during a conference call on August 20, 1994 at 1600 EST. RG&E received verbal approval of the enclosed Enforcement Discretion during a phone conversation between Mr. William Lazarus NRC, Region I, and Robert Mecredy, Vice President, Nuclear Production at approximately 1720 EST on that same date. This letter provides all necessary information requested during these two phone conversations.

Very truly yours,


Robert C. Mecredy

xc: U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Assistant Director for Region I Reactors
Mr. Jose A. Calvo
Washington, D.C. 20555

Ginna Station Senior Resident Inspector

9411030360 941027
PDR ADDCK 05000244
PDR

1. DESCRIPTION OF TECHNICAL SPECIFICATION REQUIREMENT

Ginna Station Technical Specification (TS) 3.4.2.1 requires that both motor-driven Auxiliary Feedwater (MDAFW) pumps be operable with the RCS temperature $\geq 350^{\circ}\text{F}$. Action Statement 3.4.2.1.a states that if one MDAFW pump is inoperable, the pump must be restored to operable status within 7 days or the plant shall be in at least Hot Shutdown within 6 hours and at an RCS temperature $< 350^{\circ}\text{F}$ within the following 6 hours.

2. DESCRIPTION OF REQUEST

On August 24, 1994 at 0530 hours, MDAFW Pump B was removed from service to perform scheduled testing and maintenance of the associated service water cooling supply strainer and the AC lube oil pump (Procedures EM-785 and M-44.13, and Work Order #19400838). The maintenance activities were completed on August 25, 1994 and a limited test was subsequently performed on MDAFW Pump B beginning at 1430 hours to verify the operability of the AC lube oil pump breaker. At 1432 hours, the operators noticed that the normally closed recirculation line air-operated valve (AOV 4310) for MDAFW Pump B did not open as required. The pump was then secured and a trouble card was initiated for AOV 4310 at 1435 hours.

Preparations were then initiated to perform the repair of AOV 4310. The valve was repaired and a full pump test (Procedure PT-16Q-B) was then performed on August 26, 1994 to verify pump and valve operability. At 2220 hours, it was determined that the MDAFW pump did not meet the Δp requirements and a trouble card was initiated for the pump. Major repairs on MDAFW Pump B were subsequently initiated which included complete disassembly of the pump. It is noted that Procedure PT-16Q-B was successfully performed on MDAFW Pump B on August 18th.

RG&E has conservatively assumed that MDAFW Pump B has been inoperable since August 24, 1994 at 0530 hours when initial work activities began and the LCO was entered. However, since repair activities of the pump were not initiated until late on August 26, 1994, and due to the lead time for replacement parts and the need to perform post-maintenance testing, RG&E does not anticipate that the necessary repairs and testing can be accomplished within the TS required 7 days. Enforcement Discretion is therefore requested to grant RG&E relief from compliance with the requirements of TS 3.4.2.1.a.

This Enforcement Discretion is requested to begin on August 31, 1994 at 0530 hours when the current LCO for TS 3.4.2.1.a will expire. The Enforcement Discretion is requested to end on September 2 at 0800 hours when all necessary repair and testing activities will be completed. This is an extension of 50.5 hours.

3. BASIS FOR REQUEST

There are a total of five AFW pumps installed at Ginna Station. The preferred AFW system has two 100% capacity MDAFW pumps and one 200% capacity turbine driven (TDAFW) pump. The Standby Auxiliary Feedwater (SAFW) system has two 100% capacity MDAFW pumps which are manually started by the operators if normal AFW is lost (e.g., high energy line breaks in the Intermediate Building).

The safety-related function of the AFW system at Ginna Station is to mitigate the following accidents or events (UFSAR Section 10.5.2.1):

- a. Loss of main feedwater (MFW) with offsite power available
- b. Loss of MFW without offsite power available
- c. MFW line rupture
- d. Main Steam line rupture
- e. Loss of all AC power (onsite and offsite)
- f. LOCA
- g. Steam Generator Tube Rupture (SGTR)
- h. Cooldown

Items c and d have been evaluated for Ginna Station assuming that only the redundant SAFW system is available (UFSAR Section 15.2.7.3) while item e only requires the TDAFW pump (UFSAR Section 15.2.5). Items a and b are bounded by the analysis for the high energy line breaks in the Intermediate Building (i.e., items c and d) due to the available water inventory in the intact SGs. The SAFW system can also be used for cooldown events (item g) due to the time which would be available as a result of low decay heat levels. Consequently, only LOCAs and SGTRs (i.e., items f and g) must be considered with respect to the inoperable MDAFW pump.

Following a LOCA or SGTR, the preferred AFW system will receive an automatic start signal to provide cooling water to the steam generators. However, for all LOCAs, both the TDAFW pump and MDAFW Pump A will be available to provide the necessary cooling water. There is no single failure which can result in the loss of both of these pumps during a LOCA.

In the case of a SGTR, it can be postulated that a rupture occurs in SG A which would result in the isolation of automatic AFW flow from MDAFW Pump A and the TDAFW pump (to S/G A only). Only automatic flow from the TDAFW pump to SG B would be available in this instance. Operator action is already required for a SGTR event to depressurize the RCS. Since this ten minute delay is already assumed in the accident analysis, it can be assumed that time is also available to use the SAFW system or cross-tie MDAFW A to SG B if the TDAFW pump were to fail. In addition, it is noted that the increased SG level in the ruptured SG provides additional time before AFW would be required.

A review of the Ginna Station PRA indicates that a tube rupture in SG A with a subsequent failure of the TDAFW pump, thus requiring the need for SAFW, is of very low probability ($\sim 1.4\text{E-}06$ for the additional 2 day MDAFW Pump outage). In addition, the AFW system is in standby during normal power operations. It is not considered prudent to require a plant shutdown through modes in which the preferred AFW system is used to provide normal SG cooling water needs with one MDAFW pump inoperable. The potential for plant transients and the subsequent need for AFW during these mode transitions is also increased.

4. COMPENSATORY ACTIONS

RG&E will not perform any testing or maintenance related to the remaining AFW and SAFW pumps and their necessary support systems during the requested two day extension. In addition, operator awareness of RCS leakage has been increased since leakage can be used as an indication of a potential LOCA or SGTR. The Operations Plan of the Day (POD) has also been revised to enhance operator awareness of the use of the MDAFW pump cross-tie lines if required.

5. JUSTIFICATION FOR DURATION OF REQUEST

The requested two day LCO extension is necessary to ensure completion repairs on MDAFW Pump B and to perform the required testing. The two day extension is based on the need to complete the alignment of the pump including the speed increaser. Based on previous experience, these activities may require multiple iterations. During this requested extension, three 100% capacity AFW pumps and one 200% capacity TDAFW pump are available to provide the necessary cooling water to the SGs for decay heat removal. As discussed in Section 3, the probability of an accident which requires the AFW pumps during the two day extension is very small.

MDAFW Pump A was successfully tested on August 16, 1994 (Procedure PT-16Q-A). Testing of the TDAFW pump was also successfully performed on August 22, 1994 (Procedure PT-16Q-T) providing additional assurance the continued operability of these pumps. Attachment A provides a summary of the most recent AFW and SAFW pump tests.

6. SIGNIFICANT HAZARDS EVALUATION

RG&E has evaluated the Enforcement Discretion request and concluded that there is no potential detriment to the public health and safety and that a significant safety hazard is not involved. This basis for this conclusion is summarized below:


- a. Extending the current outage of MDAFW Pump B for approximately two days does not result in a significant increase in the probability or consequences of an accident previously evaluated. The remaining AFW and SAFW pumps provide sufficient redundancy to mitigate all potential accidents.
- b. Extending the current outage of MDAFW Pump B for approximately two days does not create the possibility of a new or different kind of accident from any previously evaluated. The only accident which can be initiated by AFW is an overcooling event caused by spurious actuation. Since MDAFW Pump B is not operable, this accident is not credible during the requested extension. No other new or different kinds of accident are created by the plant condition during the two day extension.
- c. Extending the current outage of MDAFW Pump B for approximately two days does not involve a significant reduction in a margin of safety. The remaining AFW and SAFW pumps provide sufficient redundancy to mitigate all potential accidents. In addition, operators are sufficiently trained and procedures address the response to a loss of MFW.

7. ENVIRONMENTAL IMPACT

There are no environmental releases associated with the current plant condition. The probability of requiring use of the inoperable MDAFW pump is very small. In addition, sufficient guidance is currently available to the operators to respond to any postulated scenario which would require AFW or the SAFW system. Therefore, there are no environmental consequences associated with this request.

8. REVIEW BY PORC

The Ginna Station PORC has reviewed and approved this request for Enforcement Discretion.


Thomas Marlow
Ginna Station PORC Chairman

8/30/94
Date

Attachment A

OVERALL AFW PUMP STATUS

<u>PUMP</u>	<u>CURRENT Δ P/Δ P LIMIT</u>	<u>VIBRATIONS</u>
"A" MDAFWP	1150/1120 ⁽¹⁾	No Adverse Trends
"B" MDAFWP	(Pending Rebaseline Test Following Corrective Maintenance ~ 8/30/94)	
Turbine AFWP	1160/1131 ⁽¹⁾	No Adverse Trends
"C" SBAFWP	1250/1122 ⁽²⁾	No Adverse Trends
"D" SBAFWP	1267/1152 ⁽²⁾	No Adverse Trends

(1) -Based on NS&L Design Analysis

(2) -Based on ASME Section XI Code Formula

